

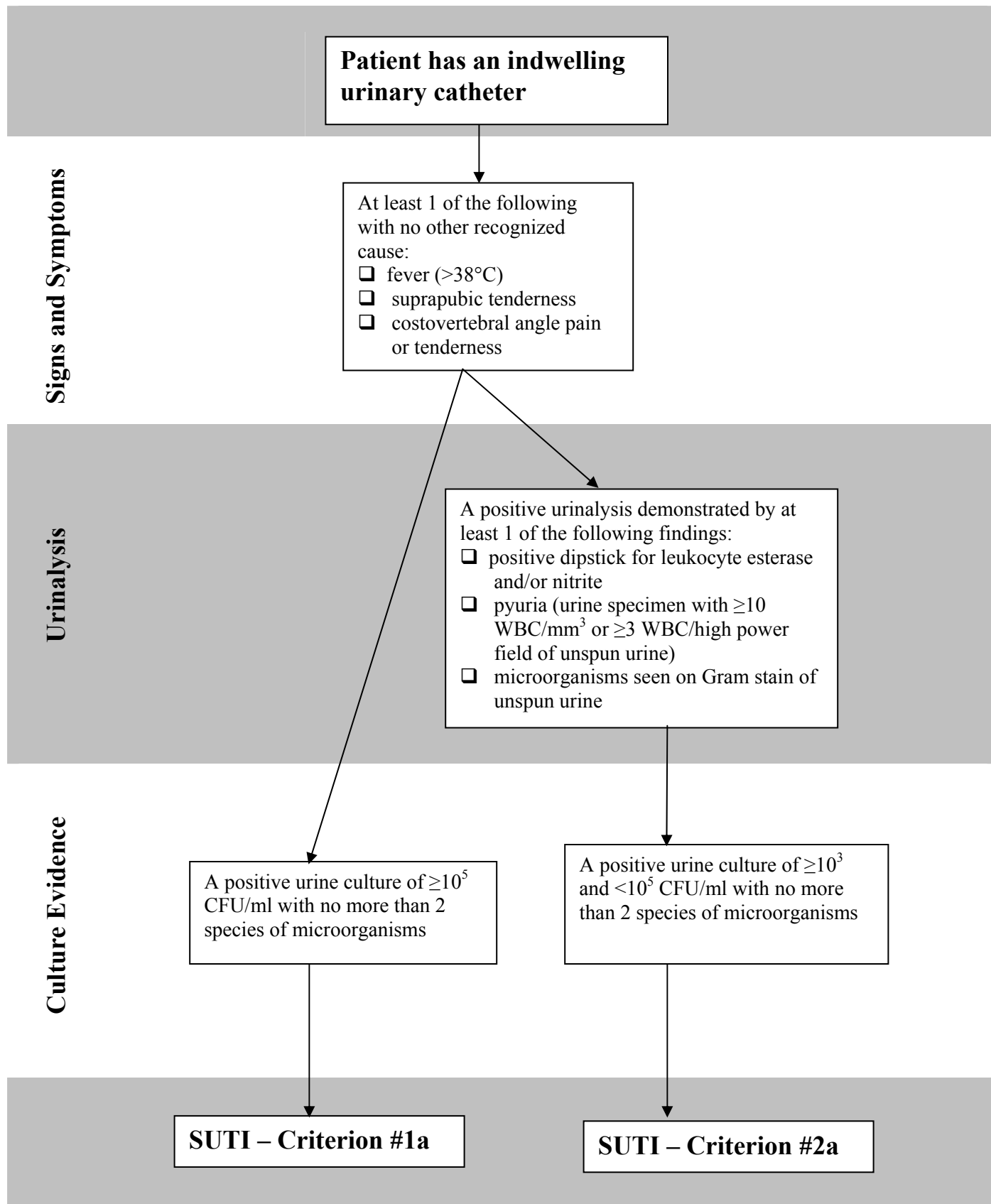
Urinary Tract Infection

Criterion	Symptomatic Urinary Tract Infection (SUTI) Must meet at least 1 of the following criteria:
1a	Patient has an indwelling urinary catheter in place <i>and</i> at least 1 of the following signs or symptoms with no other recognized cause : fever ($>38^{\circ}\text{C}$), suprapubic tenderness, or costovertebral angle pain or tenderness <i>and</i> a positive urine culture of $\geq 10^5$ colony-forming units (CFU)/ml with no more than 2 species of microorganisms.
1b	Patient does <u>not</u> have an indwelling urinary catheter in place <i>and</i> has at least 1 of the following signs or symptoms with no other recognized cause : urgency, frequency, dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness <i>and</i> a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms.
2a	Patient has an indwelling urinary catheter in place <i>and</i> has at least 1 of the following signs or symptoms with no other recognized cause : fever ($>38^{\circ}\text{C}$), suprapubic tenderness, or costovertebral angle pain or tenderness <i>and</i> a positive urinalysis demonstrated by at least 1 of the following findings: <ul style="list-style-type: none"> a. positive dipstick for leukocyte esterase and/or nitrite b. pyuria (urine specimen with ≥ 10 white blood cells [WBC]/mm^3 or ≥ 3 WBC/high power field of unspun urine) c. microorganisms seen on Gram stain of unspun urine <i>and</i>

	a positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms.
2b	<p>Patient does <u>not</u> have an indwelling urinary catheter in place</p> <p><i>and</i></p> <p>has at least 1 of the following signs or symptoms with no other recognized cause: urgency, frequency, dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness</p> <p><i>and</i></p> <p>a positive urinalysis demonstrated by at least 1 of the following findings:</p> <ul style="list-style-type: none"> b. positive dipstick for leukocyte esterase and/or nitrite d. pyuria (urine specimen with ≥ 10 WBC/mm³ or ≥ 3 WBC/high power field of unspun urine) e. microorganisms seen on Gram stain of unspun urine <p><i>and</i></p> <p>a positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms.</p>
3	<p>Patient ≤ 1 year of age (with or without an indwelling urinary catheter) has at least 1 of the following signs or symptoms with no other recognized cause: fever ($> 38^\circ\text{C}$ core), hypothermia ($< 36^\circ\text{C}$ core), apnea, bradycardia, dysuria, lethargy, or vomiting</p> <p><i>and</i></p> <p>a positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms.</p>
4	<p>Patient ≤ 1 year old (with or without an indwelling urinary catheter) has at least 1 of the following signs or symptoms with no other recognized cause: fever ($> 38^\circ\text{C}$ core), hypothermia ($< 36^\circ\text{C}$ core), apnea, bradycardia, dysuria, lethargy, or vomiting</p> <p><i>and</i></p> <p>a positive urinalysis demonstrated by at least one of the following findings:</p> <ul style="list-style-type: none"> a. positive dipstick for leukocyte esterase and/or nitrite b. pyuria (urine specimen with ≥ 10 WBC/mm³ or ≥ 3 WBC/high power field of unspun urine)

	<p>c. microorganisms seen on Gram's stain of unspun urine</p> <p><i>and</i></p> <p>a positive urine culture of between $\geq 10^3$ and $< 10^5$ CFU/ml with no more than two species of microorganisms.</p>
Comments	<ul style="list-style-type: none"> • Urinary catheter tips should not be cultured and are not acceptable for the diagnosis of a urinary tract infection. • Urine cultures must be obtained using appropriate technique, such as clean catch collection or catheterization. Specimens from indwelling catheters should be aspirated through the disinfected sampling ports. • In infants, urine cultures should be obtained by bladder catheterization or suprapubic aspiration; positive urine cultures from bag specimens are unreliable and should be confirmed by specimens aseptically obtained by catheterization or suprapubic aspiration. • Urine specimens for culture should be processed as soon as possible, preferably within 1 to 2 hours. If urine specimens cannot be processed within 30 minutes of collection, they should be refrigerated, or inoculated into primary isolation medium before transport, or transported in an appropriate urine preservative. Refrigerated specimens should be cultured within 24 hours. • Urine specimen labels should indicate whether or not the patient is symptomatic.
Criterion	<p>Other Urinary Tract Infection (OUTI) (kidney, ureter, bladder, urethra, or tissue surrounding the retroperineal or perinephric space)</p> <p>Other infections of the urinary tract must meet at least 1 of the following criteria:</p>
1	Patient has microorganisms isolated from culture of fluid (other than urine) or tissue from

	affected site.
2	Patient has an abscess or other evidence of infection seen on direct examination, during a surgical operation, or during a histopathologic examination.
3	<p>Patient has at least 2 of the following signs or symptoms with no other recognized cause: fever ($>38^{\circ}\text{C}$), localized pain, or localized tenderness at the involved site</p> <p><i>and</i></p> <p>at least 1 of the following:</p> <ul style="list-style-type: none"> a. purulent drainage from affected site b. microorganisms cultured from blood that are compatible with suspected site of infection c. radiographic evidence of infection (e.g., abnormal ultrasound, CT scan, magnetic resonance imaging [MRI], or radiolabel scan [gallium, technetium]).
4	<p>Patient ≤ 1 year of age has at least 1 of the following signs or symptoms with no other recognized cause: fever ($>38^{\circ}\text{C}$ core), hypothermia ($<36^{\circ}\text{C}$ core), apnea, bradycardia, lethargy, or vomiting</p> <p><i>and</i></p> <p>at least 1 of the following:</p> <ul style="list-style-type: none"> a. purulent drainage from affected site b. microorganisms cultured from blood that are compatible with suspected site of infection c. radiographic evidence of infection, (e.g., abnormal ultrasound, CT scan, magnetic resonance imaging [MRI], or radiolabel scan [gallium, technetium]).
Comments	<ul style="list-style-type: none"> • Report infections following circumcision in newborns as SST-CIRC.



**Patient does not have an
indwelling urinary catheter**

Signs and Symptoms

At least 1 of the following
with no other recognized
cause:

- ☐ urgency
- ☐ frequency
- ☐ dysuria
- ☐ suprapubic tenderness
- ☐ costovertebral angle pain
or tenderness

Urinalysis

A positive urinalysis demonstrated by at
least 1 of the following findings:

- ☐ positive dipstick for leukocyte esterase
and/or nitrite
- ☐ pyuria (urine specimen with ≥ 10
WBC/mm³ or ≥ 3 WBC/high power
field of unspun urine)
- ☐ microorganisms seen on Gram stain of
unspun urine

Culture Evidence

A positive urine culture of $\geq 10^5$
CFU/ml with no more than 2
species of microorganisms

A positive urine culture of $\geq 10^3$ and
< 10^5 CFU/ml with no more than 2
species of microorganisms

SUTI – Criterion #1b

SUTI – Criterion #2b

Patient ≤ 1 year of age (with or without an indwelling urinary catheter)

Signs and Symptoms

At least 1 of the following with no other recognized cause:

- ☐ fever ($>38^{\circ}\text{C}$ core)
- ☐ hypothermia ($<36^{\circ}\text{C}$ core)
- ☐ apnea
- ☐ bradycardia
- ☐ dysuria
- ☐ lethargy
- ☐ vomiting

Urinalysis

A positive urinalysis demonstrated by at least 1 of the following findings:

- ☐ positive dipstick for leukocyte esterase and/or nitrite
- ☐ pyuria (urine specimen with ≥ 10 WBC/ mm^3 or ≥ 3 WBC/high power field of unspun urine)
- ☐ microorganisms seen on Gram stain of unspun urine

Culture Evidence

A positive urine culture of $\geq 10^5$ CFU/ml with no more than 2 species of microorganisms

A positive urine culture of $\geq 10^3$ and $< 10^5$ CFU/ml with no more than 2 species of microorganisms

SUTI – Criterion #3

SUTI – Criterion #4

Comments

- Urinary catheter tips should not be cultured and are not acceptable for the diagnosis of a urinary tract infection.
- Urine cultures must be obtained using appropriate technique, such as clean catch collection or catheterization. Specimens from indwelling catheters should be aspirated through the disinfected sampling ports.
- In infants, urine cultures should be obtained by bladder catheterization or suprapubic aspiration; positive urine cultures from bag specimens are unreliable and should be confirmed by specimens aseptically obtained by catheterization or suprapubic aspiration.
- Urine specimens for culture should be processed as soon as possible, preferably within 1 to 2 hours. If urine specimens cannot be processed within 30 minutes of collection, they should be refrigerated or inoculated into primary isolation medium before transport, or transported in an appropriate urine preservative. Refrigerated specimens should be cultured within 24 hours.
- Urine specimen labels should indicate whether or not the patient is symptomatic.